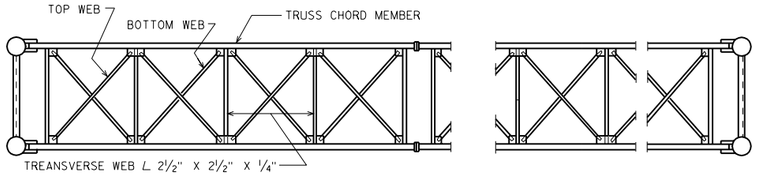
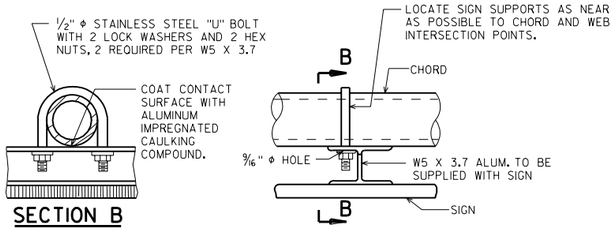
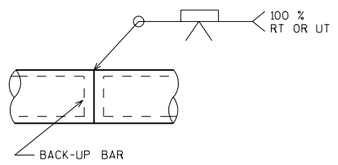


PLAN

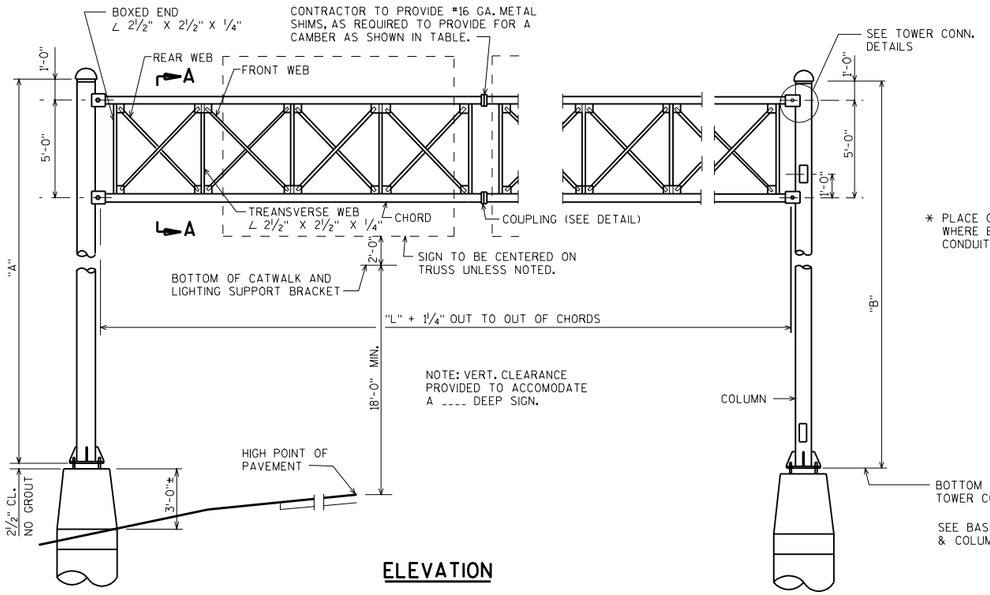


SECTION B

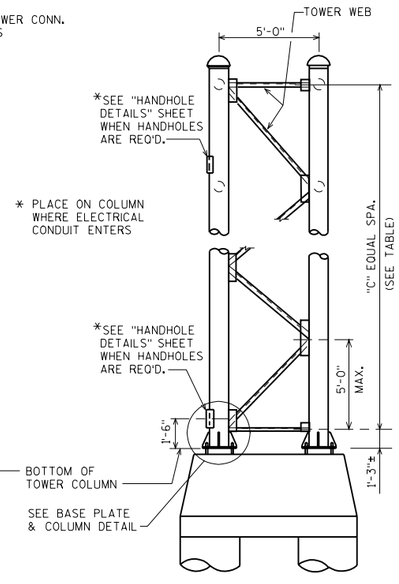
TYPICAL SIGN CONNECTION



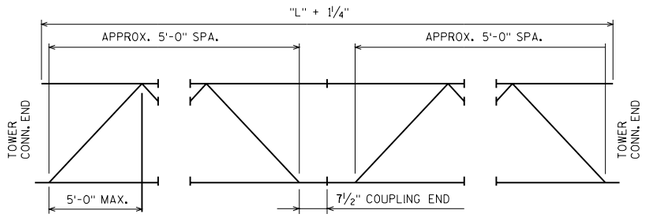
CHORD SPLICE



ELEVATION

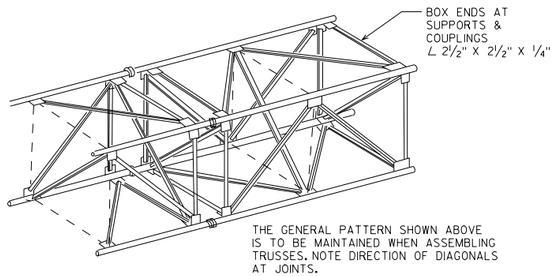


END VIEW

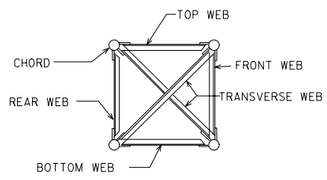


TRUSS ARRANGEMENT

FABRICATOR MAY MAKE TRUSSES ANY LENGTH KEEPING A SECTION A MINIMUM OF 20'-0" & A MULTPLE OF 5'-0". CHORD FIELD SPLICES SHALL BE MADE WITH COUPLINGS. CHORD SHOP SPLICE SHALL BE THE WELDED SPLICE SHOWN ABOVE.



TYPICAL TRUSS SECTION



SECTION A

NOTES

DRAWINGS SHALL NOT BE SCALED.
STEEL COLUMN PIPE SHALL BE A.P.I. SPEC. 5L GRADE X42 Fy = 42,000 P.S.I.
ALL STEEL PIPE MEMBERS OF TRUSS SHALL BE A.P.I. SPEC. 5L GRADE X42 Fy = 42,000 P.S.I.
PLATES, BARS, STRUCTURAL ANGLES SHALL BE A.S.T.M. A709 GRADE 36 Fy = 36,000 P.S.I.
ALL STRUCTURAL STEEL MEMBERS SHALL BE GALVANIZED.
ALL BOLTED CONNECTIONS SHALL BE MADE WITH ¾" ϕ A325 BOLTS, GALVANIZED A.S.T.M. A153, CLASS C.
WELDED CONNECTIONS CAN BE USED IN LIEU OF BOLTED CONNECTIONS, IF UNIT CAN BE GALVANIZED IN ONE PIECE.
STEEL ANCHOR BOLTS SHALL BE A.A.S.H.T.O. M314-90 GRADE 55. Fy = 55,000 P.S.I.
SIGNS OR BLANKS SHALL BE INSTALLED ON TRUSS AT TIME OF ERECTION.
BLANKS SHALL BE ¼" THE LENGTH OF THE BRIDGE, 2'-0" DEEPER THAN C TO C OF CHORDS & SHALL BE CENTERED ON THE BRIDGE. SIGNS SHALL BE AS DESIGNATED IN PLANS.
THE UPPER 12" OF ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH THE A.A.S.H.T.O. SPECIFICATION AS STATED IN SECTION 641. OF THE WIS. D.O.T. STANDARD SPECIFICATIONS.
WELD TEST AS PER AWS D1.1.

DESIGN DATA

DEAD LOAD - WT. OF SIGN, SUPPORTING STRUCTURE, CATWALK, LIGHTS AND RAILINGS.
LIVE LOAD - SINGLE LINE LOAD OF 500 LBS. DISTRIBUTED OVER 2'-0" OF CATWALK.
ICE LOAD - 3 P.S.F. TO 1 FACE OF SIGN & AROUND SURFACE OF MEMBERS.
WIND PRESSURE - 85 M.P.H. TO SIGN AREA & EXPOSED MEMBERS.

WIND COMPONENTS	NORMAL	TRANSVERSE
COMBINATION 1	1.0	0.2
COMBINATION 2	0.6	0.3
GROUP LOADS	% OF ALLOWABLE STRESS	
1. DEAD	100	
2. DEAD + WIND	140	
3. DEAD + ICE + 25 P.S.F. WIND	140	

TABLE

STRUCTURE	A	B	C	CHORDS O.D. X THK.	TOP & BOTTOM WEB	FRONT & REAR WEB	COUPLING PLATE "D1" & "T"	BOLT CIRCLE DIA. "D2"	NO. OF BOLTS IN COUPLING	CAMBER	COLUMN O.D. X THK.	TOWER WEBS	"L"

TO BE DESIGNED

4-CHORD GALVANIZED STEEL SIGN BRIDGE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DEVELOPMENT SECTION

APPROVED: _____ DATE: 1/99

STANDARD 39.2